

I CLAIM:

1. A double-edged bandsaw blade with means to support thrust in either direction of cut comprised of:

a bandsaw;

a double-edged bandsaw blade comprised of a metal band whose ends are joined to form a cylindrical loop with cutting teeth on both edges;

one or more of blade guide assemblies, each of which is comprised of a blade guide bracket assembly which supports two opposing pairs of elastomeric roller assemblies and a means to attach said blade guide assembly to a bandsaw.

2. The blade guide assemblies of claim 1 wherein the roller assemblies are comprised of a cylindrical wheel of elastomeric substance affixed to a radial bearing rotatably mounted on a shaft with means to attach said roller assembly to a supporting surface, such as said blade guide bracket assembly.

3. The blade guide assemblies of claim 2 wherein said roller assemblies are arranged around said blade in two pairs which are functionally designated as: pinch roller assemblies which serve to prevent sideways deflection and twisting of the blade by radially opposing each other on a plain perpendicular to the blade's cut plain and separated by the flat surface of said blade; while thrust roller assemblies serve to support thrust against the cutting edges by radially opposing each other parallel to the cut plain and separated by the cutting edges of said blade.

4. The thrust roller assemblies of claim 3 wherein said thrust rollers are comprised of elastomeric wheels whose circumferential thickness is greater than the distance between the gullets and the tips of the blade's teeth.

5. The thrust roller assemblies of claim 3 wherein said thrust rollers have indentations corresponding in size and shape to the teeth of said blade, such that as the blade travels along the rollers' circumference the rollers are driven synergetically, thus affording full support to thrust force against the blade while radially deflecting the lateral cutting force of the teeth.

6. The double-edged blade of claim 1 wherein said bandsaw blade's tooth length is consistently uniform and equals an integral factor of said thrust rollers' outside circumference.

7. The blade guide bracket assembly of claim 1 wherein said thrust roller assemblies and said pinch roller assemblies are supported in their positions relative to the blade by means of a metal plate with elongated adjustment slots formed in a shape that presents, relative to the cut plain; a perpendicular plain to support the pinch roller assemblies, a parallel plain to support the thrust roller assemblies, and a means to attach said blade guide bracket to a bandsaw.

8. A blade guide reverse thrust roller assembly comprising:  
an elastomeric roller with indentations corresponding synergetically to the teeth of a conventional bandsaw blade in size and shape;

a radial bearing affixed internally to said roller;

a shaft upon which said radial bearing and elastomeric is mounted with means to attach said shaft to a supporting bracket;

a bracket to support said reverse thrust roller assembly in radial opposition to the cutting edge of a prior art bandsaw blade, with means to attach said bracket and reverse thrust roller to a bandsaw.